# TRAILER CONTROL VALVE

Publication

EP 0163015 B1 19880518 (DE)

#### Application

### EP 85102434 A 19850305

Priority

## DE 3420739 A 19840601

Abstract (en)

[origin: EP0163015A2] 1. Traiter control valve for a pneumatic dual-circuit/two-line braking system having a trailer supply line arranged between the towing vehicle and the trailer vehicle and having a trailer brake line likewise arranged between the towing vehicle and the trailer vehicle, having the following features ; a) a first control chamber (2) bounded by a control piston (38) is provided which can be connected by way of a first control connection (37) to the first braking circuit of the towing vehicle ; b) a relay piston is provided which consist of a first relay piston component (7, 8) and a second relay piston component (15), the two components (7, 8, 15) of the relay piston being filly connected together, one beside the other, c) the first relay piston component (7, 8) has a first valve seat (6) and, with a valve member (34) and a second valve seat (4) forms a combined inlet and outlet valve (6, 34, 36, 4), actuable by the control piston (38), for the trailer brake line ; d) a pressure-medium inlet chamber (30) is provided which is bounded on one side by the first relay piston component (7, 8) and on the other side by a wall (18) arranged between the two relay piston components (7, 8, 15) and which can be connected by way of a supply connection (32) to a supply line of the towing vehicle ; e) a pressure-medium outlet chamber (5) is provided which is bounded on one side by the control piston (38) and on the other side by the first relay piston component (7, 8) and which can be connected by way of a pressure-medium outlet (10) to the trailer brake line; f) the pressure-medium outlet chamber (5) can be connected by way of the combined inlet and outlet valve (6, 34, 36, 4) either to the pressure-medium inlet chamber (30) or to the atmosphere ; g) a second control chamber (27) is provided which is bounded on one side by the wall (18) and on the other side by the second relay piston component (15) and which can be connected by way of a second control connection (28) to a venting control valve for an auxiliary braking circuit of the towing vehicle; h) a third control chamber (19) is provided which is bounded by the side of the second relay piston component (15) remote from the second control chamber (27) and which can be connected by way of a third control connection (26) to a second braking circuit of the towing vehicle ; characterized by the following features : i) the wall (18) is arranged in such a manner that it can be displaced in a sealed manner relative to the two relay pisto components (7, 8, 15); k) means are provided which limit the movement of the wall (18) in the direction towards the pressure-medium inlet chamber (30) in such a manner that the opening in the supply connection (32) is not changed by the wall (18) or by a component cooperating with the wall (18), and/or the supply connection (32) is arranged in such a manner that its opening is not changed by the wall (18).

### IPC 1-7

B60T 15/22

IPC 8 full level

B60T 15/22 (2006.01); B60T 15/24 (2006.01)

CPC (source: EP) B60T 15/24 (2013.01)

#### Cited by

CN114401875A; WO2021074663A1

Designated contracting state (EPC) AT CH DE FR GB IT LI NL SE

# DOCDB simple family (publication)

EP 0163015 A2 19851204; EP 0163015 A3 19861112; EP 0163015 B1 19880518; AT E34344 T1 19880615; DE 3420739 A1 19851205; DE 3562735 D1 19880623

DOCDB simple family (application)

EP 85102434 Å 19850305; AT 85102434 T 19850305; DE 3420739 A 19840601; DE 3562735 T 19850305